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A Bibliography on the Chemical Weathering of Granitic Rocks

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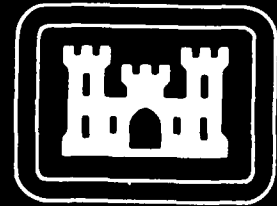
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REPORT DOCUMENTATION PAGE				Form Approved OMB No. 0704-0188	
1a. REPORT SECURITY CLASSIFICATION UNCLASSIFIED			1b. RESTRICTIVE MARKINGS		
2a. SECURITY CLASSIFICATION AUTHORITY			3. DISTRIBUTION / AVAILABILITY OF REPORT Approved for Public Release; Distribution is Unlimited.		
2b. DECLASSIFICATION / DOWNGRADING SCHEDULE					
4. PERFORMING ORGANIZATION REPORT NUMBER(S) ETL-0505			5. MONITORING ORGANIZATION REPORT NUMBER(S)		
6a. NAME OF PERFORMING ORGANIZATION U.S. Army Engineer Topographic Laboratories		6b. OFFICE SYMBOL (If applicable) CEETL-RI-S	7a. NAME OF MONITORING ORGANIZATION		
6c. ADDRESS (City, State, and ZIP Code) Fort Belvoir, Virginia 22060-5546			7b. ADDRESS (City, State, and ZIP Code)		
8a. NAME OF FUNDING / SPONSORING ORGANIZATION		8b. OFFICE SYMBOL (If applicable)	9. PROCUREMENT INSTRUMENT IDENTIFICATION NUMBER		
8c. ADDRESS (City, State, and ZIP Code)					
			10. SOURCE OF FUNDING NUMBERS		
			PROGRAM ELEMENT NO.	PROJECT NO. A161102B52C	TASK NO. C
11. TITLE (Include Security Classification) A Bibliography on the Chemical Weathering of Granitic Rocks					
12. PERSONAL AUTHOR(S) Judy Ehlen, USAETL, and A. J. W. Gerrard, Geography Department, University of Birmingham, England					
13a. TYPE OF REPORT Bibliography		13b. TIME COVERED FROM <u>n/a</u> TC <u>n/a</u>		14. DATE OF REPORT (Year, Month, Day) 1988	
15. PAGE COUNT 29					
16. SUPPLEMENTARY NOTATION					
17. COSATI CODES			18. SUBJECT TERMS (Continue on reverse if necessary and identify by block number) chemical weathering, granitic rocks, geomorphology, soils, geology.		
FIELD	GROUP	SUB-GROUP			
19. ABSTRACT (Continue on reverse if necessary and identify by block number) This bibliography lists many of the papers in the international published geological, geomorphological and soils literature that discuss the chemical weathering of rocks often considered "non-soluble." Emphasis is placed on granitic rocks.					
20. DISTRIBUTION / AVAILABILITY OF ABSTRACT <input type="checkbox"/> UNCLASSIFIED/UNLIMITED <input type="checkbox"/> SAME AS RPT <input type="checkbox"/> DTIC USERS			21. ABSTRACT SECURITY CLASSIFICATION UNCLASSIFIED		
22a. NAME OF RESPONSIBLE INDIVIDUAL F. James Books			22b. TELEPHONE (Include Area Code) (202) 355-2774		22c. OFFICE SYMBOL CEETL-IM-T

PREFACE

Part of this bibliography was compiled under DA Project 4A161102B52C, Task OC, Work Unit 010, "Indicators of Terrain Conditions."

The bibliography was prepared during the period October 1984 - May 1988 partly under the supervision of Dr. J. N. Rinker, Team Leader, Center for Remote Sensing; and Mr. Lawrence A. Gambino, Director, Research Institute.

We would like to thank the personnel of the ETL's Scientific and Technical Information Center who helped prepare this bibliography. Mildred Stiger and Dot Murphy helped to clarify and verify the details of many of the citations. Annemarie Black checked and corrected many of the non-English words and verified many of the place names. Their help was invaluable.

COL David F. Maune, EN, was Commander and Director, and Mr. Walter E. Boge was Technical Director of the Engineer Topographic Laboratories during preparation of the report.

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A BIBLIOGRAPHY ON THE CHEMICAL WEATHERING OF GRANITIC ROCKS

INTRODUCTION

This bibliography was compiled as a result of discussions at "A Workshop on Desert Processes" in 1984 (McCauley and Rinker, 1987) in which it became clear that the prevalence of chemical weathering in all environments and on "non-soluble" rocks, such as granites, was not widely appreciated. This bibliography attempts to alleviate this situation by providing a list of some of the many papers on this subject. It cannot, however, be considered comprehensive, as the literature is extensive. The listed papers address all aspects of chemical weathering--the processes (for example, Keller and Frederickson, 1952; Ollier, 1984; Williams, 1949), their effects on landforms and materials (for example, Dumanowski, 1968; Thomas, 1974a; Twidale, 1982b), climatic influences (for example, Bakker, 1960; Tardy, et al., 1973; Thomas, 1974b) and weathering products (for example, Dearman, et al., 1978; Lumb, 1962). Papers discussing the controversy concerning chemical vs. physical weathering, as well as the difficulty in separating the two processes, are also included (for example, Ollier, 1984; Palmer and Neilson, 1962). In addition, a number of papers on salt weathering, which may be physical or chemical, are listed (for example, Hay and Jones, 1972; Wellman and Wilson, 1965). Papers referring to the chemical weathering of other igneous rocks (for example, Coleman, 1982; Nossin and Levelt, 1967) or other rocks generally considered "non-soluble" (for example, Frye and Swineford, 1947; White, et al., 1966) are included.

Papers with titles enclosed in () are in a language other than English and have English summaries. Examples include Takenaga (1968), Amaral (1973) and Bouchard (1983). Those with titles in a language other than English are written in another language, but often have English summaries. Demolon and Bastisse (1936) and Bakker (1958) are examples. The listing is in alphabetic order.

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